

03/18/99
Jc494 U.S. PTO

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Patent
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BOX PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D. C. 20231

FILING UNDER 37 CFR § 1.53(b)

Jc511 U.S. PTO
09/272642
03/18/99

This is a request for filing for a

☒ continuation ☐ divisional ☐ continuation-in-part (CIP) application
under 37 CFR § 1.53(b) of pending prior application Serial No. 08/726,377, filed October 4, 1996.

by inventor: Andrew W. Scherpbier

for: **BROWSER CONTROLLER**

COPY OF PRIOR APPLICATION AS FILED WHICH IS ATTACHED

☒ I hereby verify that the attached papers are a true and complete copy of what is shown in my records to be the above-identified prior application, including the oath or declaration as originally filed. (37 CFR § 1.53)

- 26 Pages of Specification (which includes 8 pgs. claims)
- 1 Page Abstract
- 4 Sheets of Drawings
- 2 Pages of Declaration
- 2 Pages of Revocation and Grant of Power of Attorney filed Jan. 4, 1999

- ☒ Pursuant to 37 CFR 1.63(d)(1), a newly executed oath or declaration is not required.
- ☐ A newly executed oath or declaration is filed herewith

I. AMENDMENTS

- ☒ Cancel in this application original Claims 2-20 of the prior application before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
- ☐ A Preliminary Amendment is enclosed. (Claims added by Amendment must be numbered consecutively beginning with the number next following the highest numbered original claim in the prior application.)

II. INFORMATION DISCLOSURE STATEMENT

- ☐ An Information Disclosure Statement, PTO 1449, and references are submitted herewith.

III. PETITION FOR SUSPENSION OF PROSECUTION FOR THE TIME TO FILE AN AMENDMENT

- ☐ There is provided herewith a PETITION FOR SUSPENSION OF PROSECUTION FOR THE TIME NECESSARY TO FILE AN AMENDMENT (NEW APPLICATION FILED CONCURRENTLY).

IV. FEE CALCULATION

BASIC FILING FEE:					\$760.00
Total Claims	1	-	20	= 0 x \$18.00	\$0.00
Independent Claims	1	-	3	= 0 x \$78.00	\$0.00
Multiple Dependent Claims	\$260	(if applicable)		<input type="checkbox"/>	\$0.00
Surcharge 37 CFR § 1.16(e)	\$130	(if applicable)		<input type="checkbox"/>	\$0.00
TOTAL OF ABOVE CALCULATIONS					\$760.00
Reduction by ½ for Filing by Small Entity. Note 37 CFR §§ 1.9, 1.27, 1.28. If applicable, Verified Statement must be attached.					\$380.00
Misc. Filing Fees (Recordation of Assignment)					\$0.00
TOTAL FEES SUBMITTED HEREWITH					\$380.00

- ☐ The fee for extra claims is not being paid at this time.

V. SMALL ENTITY STATUS

A Verified Statement to establish small entity under 37 CFR §§ 1.9 and 1.27:

- ☐ is attached
- ☒ has been filed in the prior application and such status is still proper and desired. [37 CFR § 1.28(a)]

VI. PRIORITY - 35 USC § 119

- ☐ Priority of application Serial No. _____ filed on _____ in Country is claimed under 35 USC § 119.
- ☐ The certified copy has been filed in prior U.S. application Serial No. _____ on _____.
- ☐ The certified copy will follow.

VII. RELATE BACK - 35 USC § 120

- ☒ Amend the Specification by inserting before the first line the sentence:
This is a continuation of co-pending application Serial No. 08/726,377 filed October 4, 1996.

VIII. INVENTORSHIP STATEMENT

☒ With respect to the prior co-pending U.S. application from which this application claims benefit under 35 USC § 120, the inventor(s) in this application is (are):

☒ the same

☐ less than those named in the prior application and it is requested that the following inventor(s) identified above for the prior application be deleted:

[Name(s) of inventor(s) to be deleted]

IX. ASSIGNMENT

☒ The prior application is assigned of record to Contigo Software LLC.

☐ An Assignment of the invention to _____ is attached.

X. FEE PAYMENT BEING MADE AT THIS TIME

☒ Attached is a check in the amount of \$380.00.

☐ Charge Deposit Account No. **12-2475** in the amount of _____.

XI. AUTHORIZATION TO CHARGE ADDITIONAL FEES

The Commissioner is hereby authorized to charge any additional fee or credit any overpayment to Deposit Account No. **12-2475**:

XII. POWER OF ATTORNEY

☒ The power of attorney in the prior application is to the registered attorneys listed below and members of or associates in the law firm of **LYON & LYON LLP**, 633 West Fifth Street, 47th Floor, Los Angeles, California 90071, Registration No. 11,611, whose members are registered to practice in the U.S. Patent and Trademark office:

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Conrad R. Solum, Jr., Reg. No. 20,467
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- ☒ The power appears in the original papers in the prior application. (See copy of Revocation and Grant of Power of Attorney filed January 4, 1999 attached.)
- ☐ The power does not appear in the original papers, but was filed on _____ in this application.
- ☐ A new power has been executed and is attached.
- ☒ Address all future communications to:

LYON & LYON LLP
633 West Fifth Street, 47th Floor
Los Angeles, California 90071
(213) 489-1600
Attention: Daniel N. Yannuzzi

Respectfully submitted,

LYON & LYON LLP

By: _____

Daniel N. Yannuzzi
Reg. No. 36,727

Dated: March 18, 1999

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Enclosures

-1-

BROWSER CONTROLLER**FIELD OF THE INVENTION**

The present invention relates generally to systems and methods for browsing computer networks such as the World Wide Web ("Web"), and more particularly to systems and methods for enabling a first computer to present a display of a Web page on one or more second computers.

BACKGROUND

Use of and applications for Internet-related networks, and in particular the so-called "World Wide Web" ("Web"), increases daily. The Web is a network of computer information storage sites, and each site can include one or more information displays, colloquially referred to as "pages". Essentially, a Web site presents advertising or other information regarding a particular organization. A person with a computer and a software system referred to as a "browser" can connect the computer to the Internet (and, hence, to the Web), usually via a telephone line, and with the aid of the browser, access the various Web pages.

It happens that among the many applications of the Web, for various reasons one computer user might desire to discuss a particular Web page or pages with another

-2-

computer user who is remote from the first user. Accordingly, the users establish communication with each other, and then both log their computers onto the Web. Then, both must access the Web page they desire to discuss by retrieving (colloquially referred to as "downloading") all of the information on the desired Web page to their respective computers.

To download a Web page, a user must either input the page's address, referred to in the art as the uniform resource locator or simply URL, or the user must select the page via a hyperlink from another Web page. Stated differently, a Web page may list many other Web pages that happen to be related to it, with the listings referred to as "hyperlinks", and a user can position a mouse-controlled cursor over a hyperlink and click the mouse to cause the user's browser to access the Web page associated with the selected hyperlink.

Unfortunately, it can be confusing and frustrating for two computer users who are communicating with each other via telephone (or some other means) to coordinate the desired Web page rendezvous. This is in part because, to download a Web page, a large amount of data must ordinarily be transferred at rates that can vary, computer to computer, potentially resulting in idle periods for one user as the other user completes a download. Furthermore, a user's verbal identification of a particular hyperlink on which the user desires another user to "click" can be unclear and ambiguous. As recognized

5 requiring any modifications to the passengers' software.

Accordingly, it is an object of the present invention to provide a system and method for allowing a first computer user to cause the network browser of a second computer user to present Web pages as desired by the first user. Another object of the present invention is to provide a system and method for causing, from a local computer, one or more Web pages to be displayed on remote computers, without requiring remote user interaction. Still another object of the present invention is to provide an easy-to-use, cost-effective system and method for remotely causing a passenger computer Web browser to display Web pages selected by a pilot computer, without requiring software changes to the passenger computer, other than the temporary loading of an applet. Yet another object of the present invention is to provide a system and method for causing, from a local computer, one or more Web pages to be displayed on remote computers, while presenting a status of the remote computer displays to the user of the local computer.

SUMMARY OF THE INVENTION

A computer program device includes a computer program storage device that is readable by a digital processing system and a program means on the program storage device. As intended by the present invention, the program device is realized in a critical machine component that causes the digital processing system to perform method steps to enable a pilot computer to direct the browser of a passenger computer. Stated differently, a machine component establishes a computer program product for performing method steps for enabling a first computer to cause a second computer to display a preselected page from a computer network by transmitting, from the first computer to a control site in the computer network, a request for the predetermined page.

As disclosed in detail below, the present method steps include retrieving the predetermined page at the control site, and then, if the predetermined page includes pointers to other pages in the network, encoding the pointers to thereby render a first page wherein the pointers, when selected by a computer user viewing the page, direct the user's computer to the control site. Also, the pointers are disabled to thereby render a second page. Per the present invention, the first page is transmitted to the first computer, and the second page is transmitted to the second computer.

In a preferred embodiment, if the first computer has accessed a secondary page, the second computer is caused to display the secondary page. In a particular

-5-

embodiment, in response to the second computer transmitting a valid code to the control site, an active control, such as an applet, is downloaded from the control site to the second computer. The active control is used in executing the transmitting and displaying steps set forth above.

5 As intended by the preferred embodiment, if the first computer selects, on the first page, a pointer associated with a hyperlink site, the hyperlink site is defined to be the predetermined page. The above encoding and transmitting steps are then repeated. Desirably, the status of the second computer is reported to the first computer. Also, in response to the entry of data by the first computer in connection with the first page, the data can be electronically combined with the first page for simultaneous display thereof by the first computer.

The computer program product is also disclosed in combination with the digital processing apparatus, and in further combination with the computer network.

10 In another aspect, a computer-implemented method is disclosed for allowing a pilot computer to cause a passenger computer, which includes a passenger Web browser, to display a predetermined Web page. The method includes transmitting, at the pilot computer, the uniform resource locator (URL) of the predetermined page to a control site. The control site is a member of the Web, such that the control site can retrieve the predetermined page. Then, at the passenger computer, a code is

-6-

transmitted to the control site and, if the code is valid, an active control is received from the control site. Next, the active control cooperates with the passenger Web browser to download the predetermined Web page from the control site.

In still another aspect, a system is disclosed for allowing a pilot computer to cause a passenger computer including a passenger Web browser to display a predetermined Web page. The system includes, at the pilot computer, logic means for transmitting the uniform resource locator (URL) of the predetermined page to a control site, wherein the control site is a member of the Web. At the control site, logic means are provided for retrieving the predetermined page, and at the passenger computer logic means are provided for transmitting a code to the control site. Moreover, at the control site logic means determine whether the code is valid, and if so, logic means transmit in response thereto an active control to the passenger computer. Additionally, logic means cause the active control to cooperate with the passenger Web browser to download the predetermined Web page from the control site.

The details of the present invention, both as to its structure and operation, can best be understood in reference to the accompanying drawings, in which like reference numerals refer to like parts, and in which:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a functional block diagram of the present invention;

Figure 2 is a flow chart showing the flight creation process of the present invention;

5 Figure 3 is a flow chart showing the flight boarding process;

Figure 4 is a schematic diagram showing a user display;

Figure 5 is a flow chart showing the flight conduct process; and

Figure 6 is a state diagram showing the flight management process.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

10 Referring initially to Figure 1, a system is shown, generally designated 10, which includes a server computer, hereinafter referred to as a "control computer" 12, which is part of a computer network. In the preferred embodiment, the control computer 12 is part of the computer network 14 referred to as the World Wide Web ("Web"). As is well known, the Web 14 includes a plurality of sites, colloquially referred to as Web pages
15 14a, 14b, etc. Those skilled in the art will recognize that the control computer 12 can access the pages 14a, 14b of the Web 14 by well-known means.

As discussed further below, the control computer 12 includes a control module 16 which enables a first computer, referred to herein as a "pilot" computer, to control the

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network navigating systems (referred to herein as "Web browsers") of one or more second computers, referred to here as "passenger computers". Accordingly, Figure 1 shows that a pilot computer 18 has a pilot Web browser 20, and associated with the pilot Web browser 20 is a pilot active control, preferably a small application program colloquially referred to as an "applet" 22. The pilot applet 22 can cause the pilot Web browser 20 to communicate with the control module 16 via a computer network, e.g., the internet 23 shown. Similarly, Figure 1 shows one or more passenger computers (only a single passenger computer 24 shown in Figure 1 for clarity), and the passenger computer 24 has a passenger Web browser 26. A passenger active control, preferably a passenger applet 28, is associated with the passenger browser 26 to cause the passenger browser 26 to communicate with the control module 16 via the internet 23. The pilot computer 18 and passenger computer 24 can be any suitable user computer, e.g., a personal computer or laptop computer, each having a respective video monitor or flat panel display 18a, 24a for presenting Web pages 14a, 14b thereon. Also, the browsers 20, 26 can advantageously be commercial browsers, such as are made by Netscape and Microsoft Corp.

Figures 2, 3, and 5 illustrate the structure of the control module 16 and applets 22, 28 of the present invention as embodied in computer program software. Those skilled in the art will appreciate that the Figures illustrate the structures of logic elements,

such as computer program code elements or logic circuits, that function according to this invention. Manifestly, the invention is practiced in its essential embodiment by a machine component that renders the logic elements in a form that instructs a digital processing apparatus (that is, a computer) to perform a sequence of function steps
5 corresponding to those shown in the Figures.

These instructions may reside on a program storage device including a data storage medium, such as a computer diskette. Alternatively, such media can also be found in semiconductor devices, on magnetic tape, on optical disks, on a DASD array, on a conventional hard disk drive, on electronic read-only memory or on electronic random access memory, or other appropriate data storage device. In an illustrative embodiment of the invention, the logic means are computer-executable instructions that are written in the Java language.

Figure 2 shows the initialization process of the present invention. As can be understood from the above discussion, the present invention uses airline terminology for ease of illustration and understanding. For example, a Web site tour through which the user of the pilot computer 18 plans to guide the passenger computer 24 is referred to as a "flight". Accordingly, the initialization process shown in Figure 2 can be considered a flight creation process which commences at start state 30 and moves to block 32, wherein the pilot computer 18 loads the pilot applet 22. Preferably, the pilot applet 22

-10-

includes a flight creation applet. In the preferred embodiment, the pilot applet 22 is downloaded from the control module 16. The flight creation applet enables the pilot computer to transmit the user name and password of the user of the pilot computer 18. At decision diamond 36, the control module 16 determines whether the user name and password are valid, and if not causes the pilot computer 18 to display a message at block 38 indicating that the pilot computer 18 lacks the necessary authorization to create a flight.

On the other hand, if the password is valid the control computer proceeds to block 40 to send a pilot identification code, colloquially referred to as a "cookie", to the pilot computer 18. With this pilot identification code, the flight creation applet permits the pilot computer 18, at block 42, to transmit a flight request to the control module 16 using HTTP protocol. This flight request lists one or more Web pages to which the user of the pilot computer 18 wishes to guide the passenger computer(s) 24. Also, the flight request can include other data, such as the identifications of the intended passenger computers.

Proceeding to decision diamond 44, the logic of the system 10 next determines whether the control module 16 is able to comply with the requested flight. If not, an error message is returned, but otherwise the control module 16 creates the requested flight at block 46 by generating a flight number for the flight and recording information pertinent thereto, e.g., the desired Web pages.

It is next necessary that the passenger computer 24 relinquish control of the passenger browser 26 to the pilot computer 18 by "boarding" the flight thus created. A passenger can board a flight at any time during the flight. Accordingly, referring now to Figure 3, at block 50, using its Web browser 26 the passenger computer 24 accesses the control module 16 using the appropriate URL to download a boarding applet therefrom. Then, at block 52 the user of the pilot computer 18 communicates to the passenger computer 24 user, via voice, e-mail, or other means, the flight number of the flight created at block 46 of Figure 2. Using the boarding applet, at block 54 the user of the passenger computer 24 sends the flight number to the control module 16, and in response, assuming the flight number sent by the passenger computer 24 is valid, the control module 16 causes the boarding applet to download a passenger applet to the passenger computer 24. The passenger computer can also send its identification to the control module 16. As indicated at block 56, when the passenger applet is downloaded, the display 24a of the passenger computer 24 is configured for the flight as shown in Figure 4.

Figure 4 shows that in the preferred configuration of the displays 18a, 24a of the computers 18, 24, the displays 18a, 24a are divided in two windows. On the top window is the computer's respective browser 20, 26 display, which presents, among other things, Web pages. In contrast, as shown in Figure 4 the bottom window presents information

-12-

pertaining to the flight applets disclosed below. In other words, the bottom window of each displays 18a, 24a presents information pertaining to the current flight.

Now referring to Figure 5, the flight conduct method steps can be seen. It is to be understood that while Figure 5 is depicted in flow chart format for ease of disclosure, some of the processes shown in Figure 5 can be continuously undertaken in parallel with each other.

Commencing at block 70, the pilot computer 18 transmits to the control module 16 a request for a predetermined Web page. It is to be understood that the request can be in the form of an instruction to execute the flight plan developed above, which plan, it will be recalled, includes the URLs of the Web pages to be accessed. In response, at block 72 the control module 16 retrieves the requested Web page.

Next, at decision diamond 74 the control module 16 determines whether the requested information contains any hyperlinks to other Web sites. When the requested information is an HTML-formatted Web page, the test at decision diamond 74 is positive, but otherwise it is negative. Thus, if the information requested at block 72 is not a Web page, i.e., if it is a non-HTML image, postscript, etc., the logic moves to block 76, wherein the control module 16 prompts the applets 22, 28 to cause the browsers 20, 26 to download the requested information into the respective computers 18, 24. Also at block 76, a page change detect applet is downloaded along with the information.

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On the other hand, if it is determined at decision diamond 74 that the requested information is a Web page and that consequently it is likely to contain hyperlinks to other Web sites, the logic proceeds to blocks 78 and 80. At block 78, the control module renders a pilot version of the requested Web page by filtering the page as follows. All of the hyperlinks of the requested Web page are encoded to point back to the control computer 12. Stated differently, after encoding the hyperlinks of the requested Web page, as presented to the user of the pilot computer 18, are in all substantial respects identical to the unencoded hyperlinks, except that when selected, the hyperlinks point not to their associated Web pages, but rather to the control computer 12.

In contrast, at block 80 a passenger version of the requested Web page is rendered by sanitizing the requested Web page by removing or otherwise disabling all of the hyperlinks of the requested Web page. Then, at block 76 the filtered and sanitized versions of the requested Web page are sent to the pilot and passenger computers 18, 24, respectively.

From block 76, the logic moves to decision diamond 82, to determine, using the page change detect applets, whether any user (pilot or passenger) has attempted to change that user's presented Web page. For example, a user might select the "BACKWARD" or "FORWARD" icon that most Web browsers feature, to retrieve other previously accessed Web pages.

If a page change detect applet detects a selection of an alternate Web page on the part of the pilot computer 18, the applet communicates the page change to the control module 16, which in turn instructs the passenger applet 28 to cause the passenger browser 26 to display the alternate Web page. Also, in the event that the pilot computer 18 has designated that a passenger computer assume a co-pilot computer function as discussed below, the page change detect applet prevents the applet of the co-pilot computer, after changing its page, from repeating the page change order to the other user computers (pilot and passenger), to thereby avoid endless loops of page change orders. In contrast, if a page change detect applet detects a selection of an alternate Web page on the part of the passenger computer 24, the applet communicates the change to the control module 16, and the control module 16 causes the lower window of the pilot display 18a to display a message indicating that the passenger computer 24 has selected another Web page for display.

Recall that the Web page presented to the user of the pilot computer 18 presents encoded versions of the hyperlinks of the selected Web page. Moving to decision diamond 86 from block 84 or from decision diamond 82 if the test there was negative, it is determined whether the user of the pilot computer 18 has selected one of the encoded hyperlinks. If the pilot has clicked on a hyperlink, the logic moves to block 88, wherein the control module 16 receives the hyperlink and decodes it to identify the

-15-

associated Web page. The control computer 12 then retrieves the associated Web page.

Next, at block 90, the control module 16 filters and sanitizes the retrieved page as disclosed previously in reference to blocks 78 and 80, and prompts the passengers' applets to download the processed pages as described above in relation to block 76. It is to be understood that when the user of the pilot computer 18 has selected (i.e., has "clicked on") a hyperlink, the pilot browser 20 immediately loads the filtered page from the control module 16, without awaiting instructions to do so from the pilot applet 24. From block 90, or from decision diamond 86 if the pilot did not click on a hyperlink, the logic moves to block 92.

At block 92, the pilot and passenger applets 22, 28 transmit messages to the control module 16 that are representative of the images presented on the displays 18a, 24a. If desired, at block 94 the passenger computer 24 data can be relayed to the pilot computer 18, to enable the pilot computer 18 to monitor the status of the presentation on the passenger display 24a. In any case, it may now be understood that data pertaining to the conduct of the flight is stored for future retrieval and reuse.

Moving next to decision diamond 96, the logic determines whether the pilot computer 18 has signified a desire to end the current flight. If so, the logic moves to block 98, wherein the control module 16 notifies all users that the flight has been ended,

-16-

and the applets 22, 28 relinquish control of the browsers 20, 26 after causing the displays 18a, 24a to present the respective screens that were presented before the flight commenced.

If the flight hasn't ended, however, the logic moves from decision diamond 96 to decision diamond 100, wherein it is determined whether the pilot computer 18 desires to proceed to the next Web site in the flight plan. If so, the logic moves to block 70, but otherwise loops back to decision diamond 82 to proceed as described above.

It may now be appreciated that by using small, downloaded applets, the above flight conduct, i.e., the transfer of control of the passenger browser 26 to the pilot computer 18, is accomplished without requiring the pre-loading of software that is specific to the system 10 at the pilot computer 18 or passenger computer 24. Furthermore, by using standard HTTP protocol, the transfer of control of the passenger browser 26 to the pilot computer 18 is accomplished without requiring special proxies, firewall additions, or exceptions at either the pilot computer 18 or passenger computer 24.

Now referring to Figure 6, the flight management logic of the present invention is shown. It is to be understood that the pilot computer 18 assumes the pilot flight management state 102 concurrently with the operations undertaken above in reference to Figure 5. It is to be further understood that the flight management steps shown in

-17-

Figure 6 can be instigated by an HTML request from the pilot computer 18 to the control computer 16 to undertake the various flight management tasks shown.

As shown in Figure 6, the logic can move to a state 104 in which the control module 16 is instructed to limit the number of passengers permitted on a flight to a predetermined number. Or, the logic can move to state 106 to eject a passenger during flight, or to state 108 to disallow preselected passengers from boarding the flight. Additionally, the logic can move to state 110 to promote a passenger computer to co-pilot status. When in co-pilot status, a user is presented with the filtered version of the Web page instead of the sanitized version, but otherwise assumes no other pilot functions. Thereby, a co-pilot computer can be allowed limited control to "click" on hyperlinks, which clicks are then processed as they are for the pilot computer 18.

Moreover, the logic can move to state 112 to demote a co-pilot user to passenger status. Or, at state 114 the pilot computer 18 can define and edit flight plans, including ordering the sequence in which it is desired that a flight retrieve preselected Web pages having associated URLs. Still further, at state 116 the pilot computer 18 can create notes on the filtered Web page presented on the pilot display 18a, and edit and review notes that might have been previously made. And, at state 118 the pilot computer 18 can load a predefined flight plan such that the pilot and passenger computers automatically are "flown" to various predetermined Web sites, and save the plan at state

120. Also, as stated above requests and other communications made by the users of the system 10 to the control module 16 are saved for analysis off-line.

While the particular BROWSER CONTROLLER as herein shown and described in detail is fully capable of attaining the above-described objects of the invention, it is to be understood that it is the presently preferred embodiment of the present invention and is thus representative of the subject matter which is broadly contemplated by the present invention, that the scope of the present invention fully encompasses other embodiments which may become obvious to those skilled in the art, and that the scope of the present invention is accordingly to be limited by nothing other than the appended claims.

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WHAT IS CLAIMED IS:

- 1 1. A computer program device comprising:
- 2 a computer program storage device readable by a digital processing system; and
- 3 a program means on the program storage device and including instructions
- 4 executable by the digital processing system for performing method steps for enabling a
- 5 first computer to cause at least one second computer to display a preselected page from
- 6 a computer network by transmitting, from the first computer to a control site in the
- 7 computer network, a request for the predetermined page, the method steps comprising:
- 8 (a) retrieving the predetermined page;
- 9 (b) if the predetermined page includes pointers to other pages in the
- 10 network, (1) encoding the pointers to thereby render a first page wherein the
- 11 pointers, when selected by a computer user viewing the page, direct the user's
- 12 computer to the control site, and (2) disabling the pointers from the predetermined
- 13 page to thereby render a second page;
- 14 (c) transmitting the first page to the first computer; and
- 15 (d) transmitting the second page to the second computer.

1 2. The computer program device of Claim 1, wherein the method steps further
2 comprise:

3 (e) if the first computer has accessed a secondary page, causing the
4 second computer to display the secondary page.

1 3. The computer program device of Claim 2, wherein the method steps further
2 comprise:

3 in response to the second computer transmitting a valid code to the control
4 site, downloading from the control site to the second computer an active control;
5 and

6 executing steps (d) and (e) by instructing the active control to cause the
7 second page to be downloaded.

8 4. The computer program device of Claim 3, wherein the method steps further
9 comprise:

10 if the first computer selects, on the first page, a pointer associated with a
11 hyperlink site, defining the hyperlink site to be the predetermined page and then
12 repeating steps (a)-(d).

-21-

1 5. The computer program device of Claim 4, wherein the method steps further
2 comprise:
3 reporting to the first computer the status of the second computer displaying
4 the second page.

1 6. The computer program device of Claim 5, wherein the method steps further
2 comprise:
3 in response to the entry of data by the first computer in connection with the
4 first page, electronically combining the data with the first page for simultaneous
5 display thereof.

1 7. The computer program device of Claim 6, in combination with the digital
2 processing apparatus.

1 8. The combination of Claim 7, in further combination with the computer
2 network.

-22-

1 9. A computer-implemented method for allowing a pilot computer to cause a
2 passenger computer including a passenger Web browser to display a predetermined
3 Web page, comprising the steps of:

4 at the pilot computer, transmitting the uniform resource locator (URL) of the
5 predetermined page to a control site, the control site being a member of the Web,
6 such that the control site can retrieve the predetermined page;

7 at the passenger computer, transmitting a code to the control site and, if
8 the code is valid, receiving in response thereto an active control from the control
9 site; and

10 causing the active control to cooperate with the passenger Web browser
11 to download the predetermined Web page from the control site.

12 10. The computer-implemented method of Claim 9, wherein the pilot computer
13 includes a pilot Web browser, and the method further comprises the steps of:

14 at the pilot computer, receiving an active control from the control site; and

15 causing the active control of the pilot computer to cooperate with the pilot
16 Web browser to download the predetermined Web page from the control site.

-23-

1 11. The computer-implemented method of Claim 10, wherein prior to
2 downloading the Web page to the pilot computer, hyperlinks from the Web page to other
3 pages on the Web are encoded to point to the control site.

1 12. The computer-implemented method of Claim 11, wherein prior to
2 downloading the Web page to the passenger computer, hyperlinks from the Web page
3 to other pages on the Web are disabled.

1 13. The computer-implemented method of Claim 12, further comprising the step
2 of determining whether the pilot computer has accessed a secondary page, and if so,
3 causing the active control at the passenger computer to cooperate with the passenger
4 Web browser to display the secondary page.

1 14. The computer-implemented method of Claim 13, wherein the passenger
2 computer includes a data display, and the method further comprises the steps of:

3 in response to the pilot computer selecting a hyperlink on the Web page,

4 (1) causing the control site to decode the URL associated with
5 the hyperlink;

6 (2) at the control site, retrieving the associated Web page;

-24-

7 (3) causing the active control at the passenger computer to
8 cooperate with the passenger Web browser to download the associated
9 Web page from the control site; and

10 (4) reporting to the pilot computer the status of the passenger
11 computer display.

1 15. A system for allowing a pilot computer to cause a passenger computer
2 including a passenger Web browser to display a predetermined Web page, comprising:

3 at the pilot computer, logic means for transmitting the uniform resource
4 locator (URL) of the predetermined page to a control site, the control site being
5 a member of the Web;

6 at the control site, logic means for retrieving the predetermined page;

7 at the passenger computer, logic means for transmitting a code to the
8 control site;

9 at the control site, logic means for determining whether the code is valid,
10 and if so, transmitting in response thereto an active control to the passenger
11 computer; and

12 logic means for causing the active control to cooperate with the passenger
13 Web browser to download the predetermined Web page from the control site.

1 16. The system of Claim 15, wherein the pilot computer includes a pilot Web
2 browser, and the system further comprises:

3 at the pilot computer, logic means for receiving an active control from the
4 control site; and

5 logic means for causing the active control of the pilot computer to
6 cooperate with the pilot Web browser to download the predetermined Web page
7 from the control site.

8 17. The system of Claim 16, further comprising:

9 logic means for encoding hyperlinks from the Web page to other pages on
10 the Web to point to the control site prior to downloading the Web page to the pilot
11 computer; and

12 logic means for disabling hyperlinks from the Web page to other pages on
13 the Web prior to downloading the Web page to the passenger computer.

14 18. The system of Claim 17, further comprising logic means for determining
15 whether the pilot computer has accessed a secondary page, and if so, causing the active

-26-

3 control at the passenger computer to cooperate with the passenger Web browser to
4 display the secondary page.

1 19. The system of Claim 18, wherein the passenger computer includes a data
2 display, and the system further comprises:

3 logic means for enabling the pilot computer to select a hyperlink on the
4 Web page;

5 logic means for decoding the URL associated with the hyperlink;

6 logic means for retrieving the associated Web page to the control site;

7 logic means for causing the active control at the passenger computer to
8 cooperate with the passenger Web browser to download the associated Web
9 page from the control site; and

10 logic means for reporting to the pilot computer the status of the passenger
11 computer display.

1 20. The system of Claim 19, in combination with a computer network.

ABSTRACT

A pilot computer can control the Web browser of at least one passenger computer. The user of the passenger computer is instructed to log onto a control site, which downloads an active control, such as an applet, to the passenger computer. An active control is also provided to the pilot computer. If the pilot computer desires to present a particular Web page to both the pilot computer and the passenger computer for, e.g., discussing the page during a conference call, the pilot computer transmits the appropriate URL to the control site, which then retrieves the Web page. Next, the control site sanitizes the page by disabling its hyperlinks, and then the control site causes the passenger computer's active control to download the sanitized page. Also, the control site filters the page such that the hyperlinks are not disabled, but are rather encoded to point back to the control site, and this filtered page is downloaded to the pilot computer. The pilot computer can then "click" on a hyperlink, causing the control site to decode the hyperlink, retrieve the appropriate Web page, and instruct the passenger computer's active control to download the page after sanitizing the page.

Fig. 1

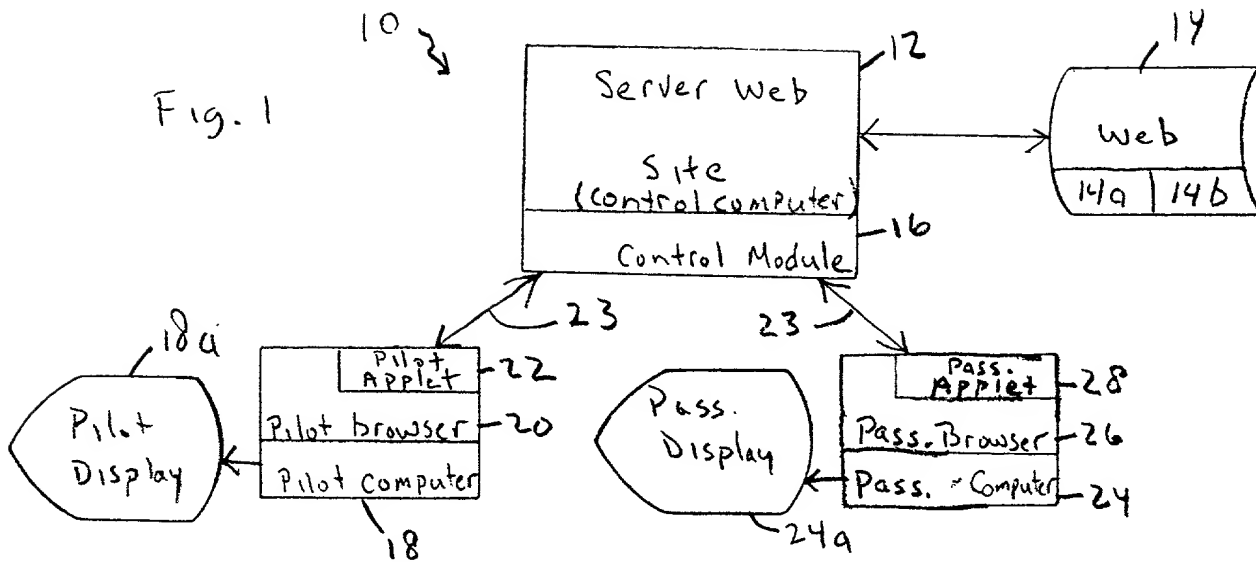


Fig. 2
Flight creation

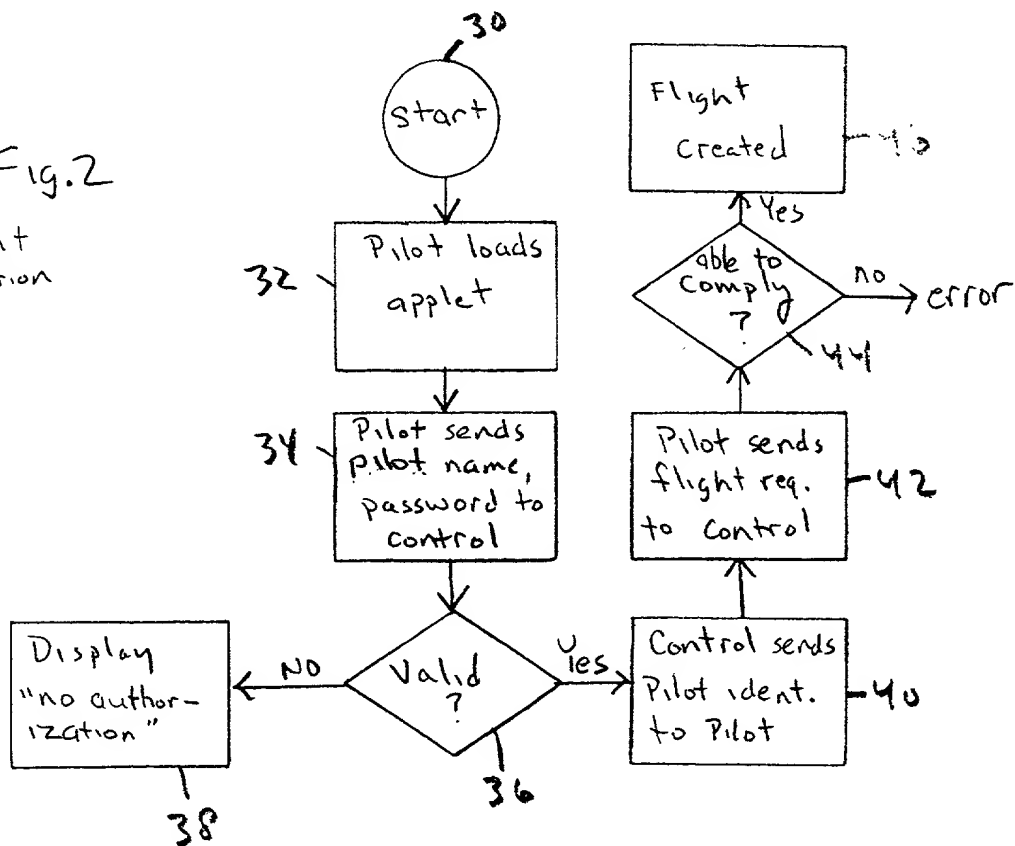


Fig. 3

Flight
boarding

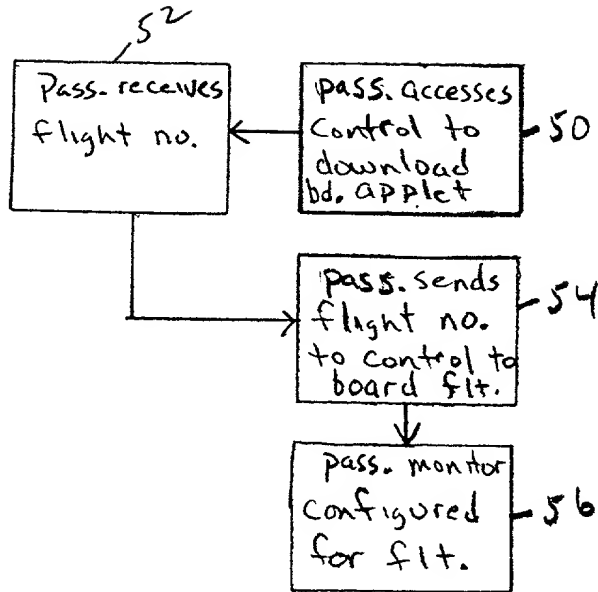
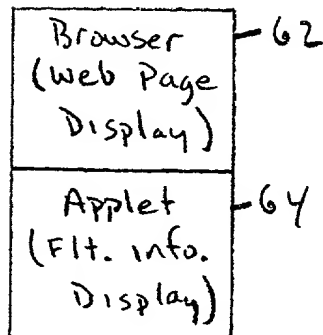


Fig. 4

60 →



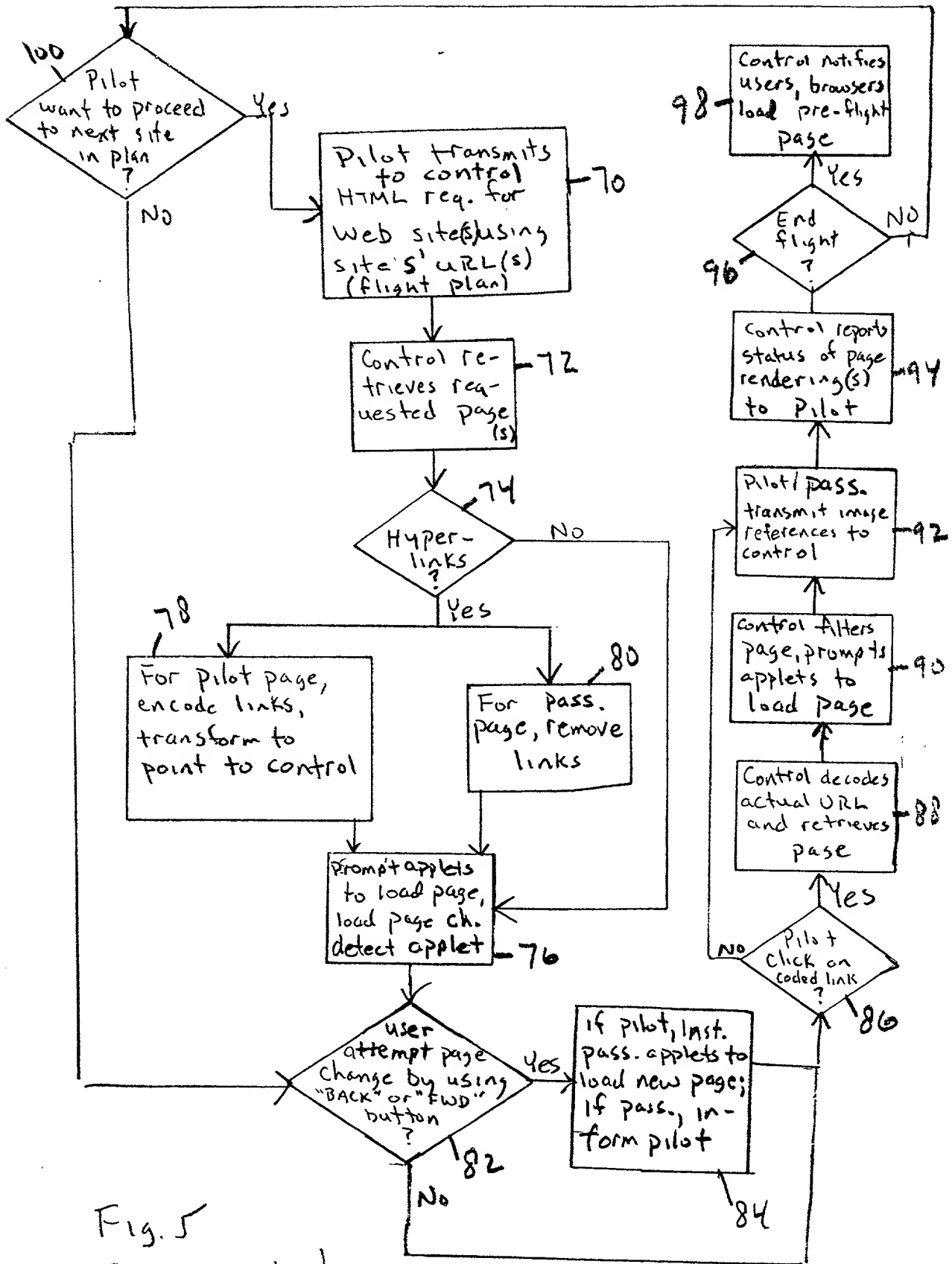
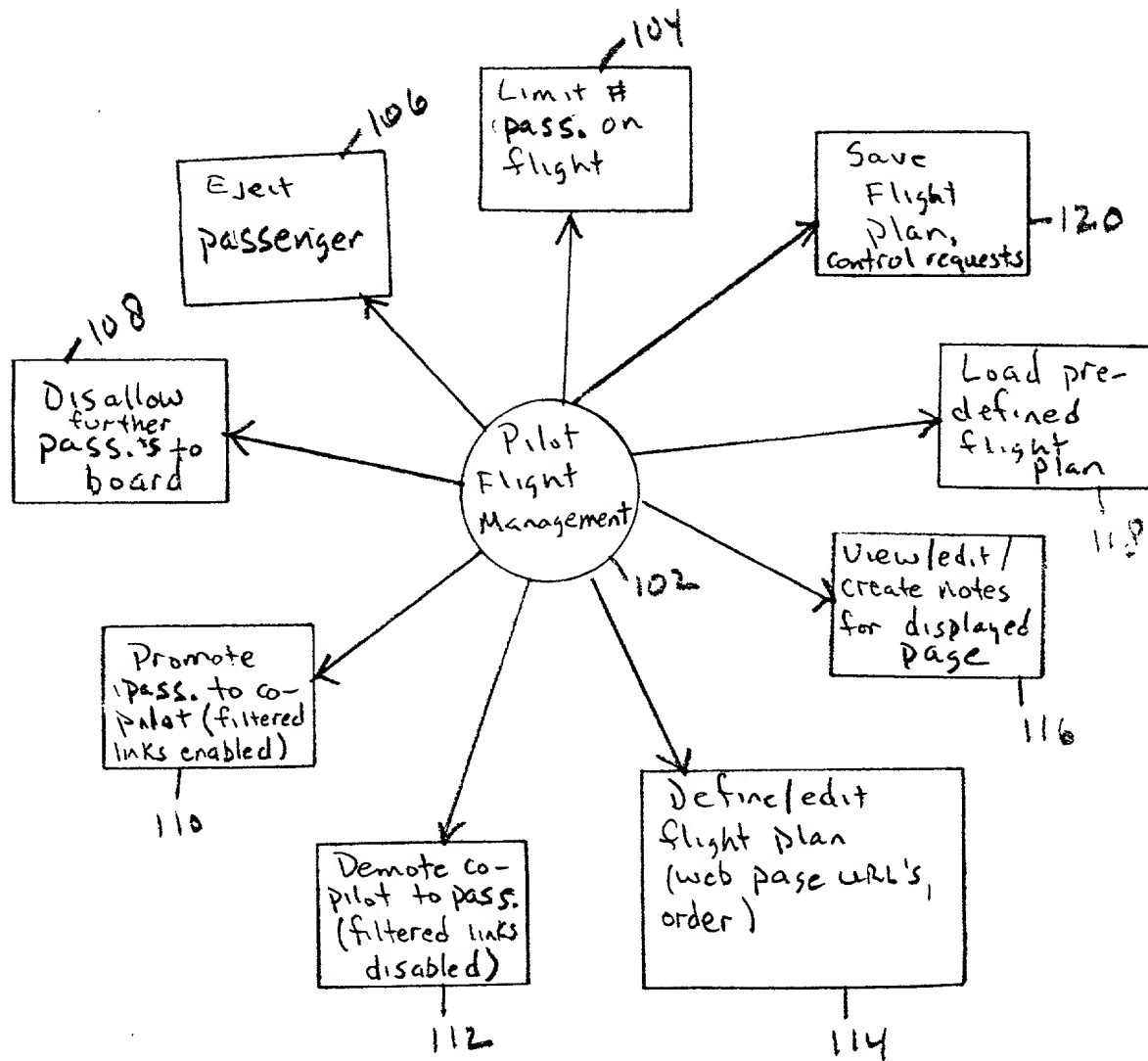


Fig. 5
Flight conduct

Fig. 6 Flight Management



66272642.03189

IN THE UNITED STATES PATENT OFFICE

In re application of: Scherpbier)
)
Serial No. 08/726,377) Group Art Unit: 2756
)
Filed: October 4, 1996) Examiner: Pierce
)
For: BROWSER CONTROLLER)
)
)
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)

REVOCATION AND GRANT OF POWER OF ATTORNEY

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Contigo Software, the owner by assignment of all right, title, and interest in and to the subject application, hereby revokes all powers of attorney heretofore granted for this application.

Contigo Software hereby appoints as its attorneys of record herein, with full power of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

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SD-92746.1

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Contigo Software

Dated: 12/30/98

By: 
Name: Amir Moussavian
Title: Chairman & CEO

DECLARATION - USA PATENT APPLICATION

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am an original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **BROWSER CONTROLLER**, specification of which is filed herewith.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above;

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a);

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

PRIOR FOREIGN APPLICATION(S)**Priority Claimed****App. No.:****Country:****Date Filed:**

NONE

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below, and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

PRIOR U.S.A. APPLICATION(S)**Serial No.:****Filing Date:****Status:**

NONE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

1096.001A

Full name of

Sole Inventor: Andrew W. Scherpbier

Inventor's Signature: _____

Andrew W. Scherpbier

Date of Signature: _____, 1996

10/4/

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